In the Claims:

Please cancel claims 1-46 without prejudice to the inclusion of the subject matter contained therein in any later filed divisional or continuing applications.

Please add claims 47-67 as submitted herewith.

Claim 1-46. (Canceled)

Claim 47. (New) A method of determining a presence or absence of tissue oedema, the method comprising the steps of:

performing a first measurement of bioelectrical impedance in a subject at a single low frequency alternating current, wherein said single low frequency alternating current is greater than 0 kHz, but no greater than 30 kHz;

performing a second measurement of bioelectrical impedance in the same subject at the same low frequency alternating current; and

processing said first and said second measurement of bioelectrical impedance to obtain a result that is compared with a value for bioelectrical impedance measurements from a plurality of subjects unaffected by tissue oedema to thereby provide an indication of the presence or absence of tissue oedema.

Claim 48. (New) The method of claim 47, wherein the first measurement of bioelectrical impedance is of a first anatomical region of the subject and the second measurement of bioelectrical impedance is of a second anatomical region different than the first anatomical region of the same subject.

Claim 49. (New) The method of claim 48, wherein the first anatomical region and the second anatomical region are paired similar anatomical regions and wherein one of the anatomical regions is unaffected by tissue oedema.

Claim 50. (New) The method of claim 48, wherein the first anatomical region and the second anatomical region are dissimilar and wherein one of the anatomical regions is unaffected by tissue oedema.

Claim 51. (New) The method of claim 48, wherein the anatomical regions are limbs or parts of limbs.

Claim 52. (New) The method of claim 47, wherein the first measurement of bioelectrical impedance and the second measurement of bioelectrical impedance are of a same anatomical region and wherein the first measurement and the second measurement are separated in time.

Claim 53. (New) The method of claim 47, wherein the single low frequency alternating current is in the range of 5 to 20kHz.

Claim 54. (New) The method of claim 53, wherein the single low frequency alternating current is in the range of 10 to 15kHz.

Claim 55. (New) The method of claim 54, wherein the single low frequency alternating current is 10kHz.

Claim 56. (New) The method of claim 47, wherein the step of analyzing the two measurements to obtain an indication of the presence of tissue oedema includes the step of dividing a lesser result of the two measurements into a greater result of the two measurements to obtain a ratio.

Claim 57. (New) The method of claim 47, wherein the step of analyzing the two measurements to obtain an indication of the presence of tissue oedema includes the step of dividing the greater result of the two measurements into the lesser result to obtain a ratio.

Claim 58. (New) The method of claim 47, further including the step of establishing a correcting factor for analyzing the two measurements.

Claim 59. (New) The method of claim 58, wherein the step of establishing a correcting factor includes the step of obtaining bioelectrical impedance measurements from a plurality of subjects unaffected by tissue oedema.

Claim 60. (New) An apparatus for determining a presence or absence of tissue oedema for use with the method of claim 1, comprising:

a current means for applying an alternating current to at least one anatomical region, wherein the alternating current is a single low frequency greater than 0 kHz, but no greater than 30 kHz;

a monitoring means to measure bioelectrical impedance of said at least one anatomical region and produce a signal characteristic of bioimpedance for said at least one anatomical region; and

an analysis means to process signals from a first and a second measurement of bioelectrical impedance to obtain a result that is compared with a value for bioelectrical impedance measurements from a plurality of subjects unaffected by tissue oedema to thereby provide an indication of a presence or absence of tissue oedema.

Claim 61. (New) The apparatus of claim 60, wherein the current means applies a same single low frequency alternating current to a first and a second anatomical region.

Claim 62. (New) The apparatus of claim 61, wherein the same single low frequency alternating current is simultaneously applied to said first and said second anatomical region.

Claim 63. (New) The apparatus of claim 60 wherein said first and said second measurements are of a same anatomical region separated in time.

Claim 64. (New) The apparatus of claim 60, wherein the current means is a proximal electrode and a distal electrode in electrical connection with a power source.

Claim 65. (New) The apparatus of claim 60, wherein the monitoring means is a first connection and a second connection for location on or near said anatomical region.

Claim 66. (New) The apparatus of claim 60, wherein the analysis means is at least one processing means programmed to perform analysis of data in relation to the first and the second measurement of bioelectrical impedance to provide an indication of the presence of tissue oedema.

Claim 67. (New) The apparatus of claim 64, further including means for recording bioimpedance in two anatomical regions of the same subject.